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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/668,643	09/22/2000	Andrew David Birrell	18973-50 (P00-3011)	2074

7590 05/28/2004

HEWLETT-PACKARD COMPANY
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EXAMINER

JAROENCHONWANIT, BUNJOB

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/668,643

Applicant(s)

BIRRELL ET AL.

Examiner

Bunjoo Jaroenchonwanit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 14-27, 29 and 43-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 14-17, 19-22, 27, 29, 43-47 is/are rejected.
- 7) ☒ Claim(s) 18 and 23-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's election of Invention Group I in Paper No. 9 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election **without** traverse (MPEP § 818.03(a)).
2. Claims 5-13, 28, 30-42 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 9.
3. This application has been reviewed; the objections and rejections cited are as stated below.

Information Disclosure Statement

4. The information disclosure statement filed 11/08/2000 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. Applicant is suggested to verify, correct and resubmit item AG in a new PTO 849, if appropriated.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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7. Claim 15 depends on claim 1, reciting “verifying” in line 1, it is not clear whether applicant intended to refer to the verifying in claim 1. If it is, applicant is suggested preceding “verifying” in claim 5 with “said” or “the”; if it is not, then it should be preceded with “first or “second”. Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-4, 14 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant admitted prior art (AAPA).

10. Regarding claims 1-4, and 14, Applicant teaching regarding to Intermemory initiative, implicitly admitted that cooperative data backup among network nodes without centralization control was prior art (spec. page 3, 1.15-page 4, line 3). Applicant further stated, “What is needed is a free-of-charge simpler but effective and safe administration of distributed storage of backups in absence of central control. The present invention addresses this related issues.” (Page 4, lines 4-6). Evidently, applicant did not claim the invention, what is claimed in purely a prior art.

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11. Claims 1-4, 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Bell et al. (US 2002/0049778).

12. Regarding claims 1, 14, 44 and 47, Bell discloses, a method for backing up data on a plurality of computers connected via a network comprising: forming partnerships between the plurality of computers such that each computer in a partnership commits under agreements to help backup the data of its backup partners; backing up data in accordance with the agreements; and periodically verifying that previously backed up data is being retained by the computer; committed to act as backup partners in accordance with the agreements (Backup service level agreement among a plurality of nodes Fig. 6-9, 11; paragraphs.13-14, 18, 20-21, 74-87, 89-91).

13. Regarding claim 2, Bell discloses, selecting potential backup partners from among the plurality computers based on predetermined criteria (selecting backup based on SLA).

14. Regarding claim 3, Bell discloses, negotiating the agreements between the computers based on predetermined requirements, including backup requirements (SLA specified time, size partition as backup requirements, Fig. 6).

15. Regarding claim 4, Bell discloses, wherein the plurality of computers can administer a distributed cooperative backing up of data in the absence of central control (system 600 in Fig. 6, shown that the computers of enterprise form back up partner with storage node computer, and each enterprise computer manage its own SLA without centralization).

16. Regarding claims 15-16, language of the claims recited inherent features of conventional backup concept, e.g., verifying whether the data blocks files were changed since the last backed up. Another inherent feature of conventional backup concept is generating a hash value, i.e., checksum or CRC of backup data for integrity and redundancy verifications. Since Bell

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discloses periodically backup, these inherent features are required to discern whether the data is needed to be updating backed up (paragraph 44).

17. Regarding claim 44, Bell discloses the system capable of negotiate agreement to form backup up node, which inherent the partner can leave or join the system at anytime in according to the negotiation.

18. Regarding claim 45, Bell disclose system backup which required data verification among data source and data sink to determine whether backup is needed, thus preventing freeloader by partner is inherent, since backup verification is inherent feature.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 19-21 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Bell et al, as applied to claim 1, and what was well known in the art.

21. Regarding claims 19 and 21, Bell discloses the invention substantially, as claimed, as described, including agreement negotiation among network node, which is applicable for setting data backup partner either, regardless of new or old partner. Bell does not explicitly disclose in detail that the system negotiate for a new partner if the exist partner unable to accommodate or retaining backup data. However, renegotiation for a new partner, i.e., new node, which inherent a new location, if the current partner fails to compliance with the agreement, would have been

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obvious to one of ordinary skilled in the art at the time of the invention was made to do so, in order to maintain system reliability and efficiency.

22. Regarding claims 20 and 22, Bell discloses the invention substantially, as claimed, as described claim 19, but does not explicitly disclose criteria of new partner is system geographic separation and diversity. However, applicant admitted that backup data among system that located separate location and system diversity have been in a prior data backup system (spec page 2, lines 6-23; page 3, lines 2-4). Thus, including these elements, as searching criteria would have been obvious to one of ordinary skilled in the art at the time of the invention was made, because it would expand system utility, flexibility and redundancy of the system.

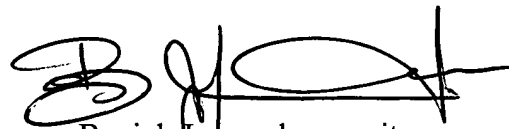
23. Claims 18, 23-26 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bunjob Jaroenchonwanit whose telephone number is (703) 305-9673. The examiner can normally be reached on 8:00-17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (703) 308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Bunjob Jaroenchonwanit', is written over the printed name.

Bunjob Jaroenchonwanit
Primary Examiner
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/bj
5/24/04